

Date: Sat, 6 Feb 93 11:38:12 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #178  
To: Info-Hams

Info-Hams Digest                      Sat, 6 Feb 93                      Volume 93 : Issue 178

Today's Topics:

1200MHz FM Experiences Sought.  
73s (Not 73)  
Can a person have a private repeater?  
Computer Control of Icom IC-R7100  
Great Circle Map Program by VK5BUB  
MFJ 1278 Rom upgrade time??  
Need help on impedance of 1/2 wave loop  
Problems with RF and '93 Sentra?  
Proposition  
QRP amplifier ?  
RF exposure  
What is the best way to access packet radio via the INTERNET  
What prevents someone from having 2 amateur licenses?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----  
Date: 6 Feb 93 14:22:34 GMT  
From: ogicse!emory!gatech!wa4mei!ke4zv!gary@network.UCSD.EDU  
Subject: 1200MHz FM Experiences Sought.  
To: info-hams@ucsd.edu

In article <C207BA.Mov@iat.holonet.net> bwilkins@iat.holonet.net (Bob Wilkins  
n6fri) writes:

>kdj@iinus1.ibm.com (Ken Johnson) writes:

>: I and a buddy have gotten a pair of Kenwood 541A's and are seriously  
>: considering putting a repeater up somewhere in the central piedmont of

>: North Carolina to stimulate some more interest in the 1200 band locally.  
>: The main obstacle is the lack of commercial hardware, so we may have to  
>: get another pair of Kenwoods and hook 'em up back-to-back.  
>  
>Kenwood is commercial hardware!

Well yes, in the sense that they charge you money for it, but it definitely isn't what we refer to as commercial grade.

>Yes I know that ge/motorola used stuff is cheaper.

With lots more filtering, better stability, etc, etc, etc.

>Your proposal of back to back is a good one. There are several  
>1280 repeaters on the west coast in this configuration. You can start with  
>out a duplexer if you can space the receive and transmit antennae about  
>40 feet vertically. Put the receive antenna in the best spot. If you cant  
>hear it .. you cant repeat it.

You can do this, but beware if you are line of sight to both 450 and 800 MHz systems. The mixing products can be fierce. Good filters make for good neighbors, consider a duplexer, isolator, and a bandpass cavity or two.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: Fri, 5 Feb 1993 20:34:11 GMT  
From: munnari.oz.au!spool.mu.edu!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!  
hpnmdla!alanb@network.UCSD.EDU  
Subject: 73s (Not 73)  
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, dubner@spk.hp.com (Joe Dubner) writes:

> Have you ever noticed the ingenious excuses that a ham will use  
>when he wants to terminate a QSO. Rather than hurt the QSOee's feelings  
>by saying he'd rather read yesterday's newspaper than continue the QSO  
>any longer, a ham will find some "crisis" needing his attention.

Well, there's always the trusty "Gotta go to the sandbox."

AL N1AL

-----  
Date: 5 Feb 93 10:03:40 -0700  
From: saimiri.primate.wisc.edu!sdd.hp.com!cs.utexas.edu!usc!  
howland.reston.ans.net!sol.ctr.columbia.edu!destroyer!cs.ubc.ca!mala.bc.ca!  
wagner@ames.arpa  
Subject: Can a person have a private repeater?  
To: info-hams@ucsd.edu

In article <C1yID1.Hwv@news.ucs.mun.ca>, dlawlor@morgan.ucs.mun.ca (Doug Lawlor) writes:

> Can a person have their own private repeater setup in Canada. I  
> understand that clubs can have them but what about a single person? If  
> they can what are the licencing requirements? Does the repeater have to  
> have it's own callsign?  
> Thanks, Doug  
>  
> --  
> Doug Lawlor, vo1cm  
> Internet: dlawlor@morgan.ucs.mun.ca or dlawlor@kean.ucs.mun.ca  
An amateur with an "Advanced Class" license may operate a private repeater.

In fact technically all repeaters are private as they can only be installed and maintained by the above mentioned class license.

Repeaters are co-ordinated in most provinces. The co-ordinator(s) are volunteer groups and are not paid for the service. The hopefully make sure that interference problems are minimized. Our repeater license states "subject to shared use (or words to that end).." The co-ordinator asked that we contact the nearest co-ordinating body and assure that we will not interfere (Washington State).

--

73, Tom

=====  
Tom Wagner, Audio Visual Technician. Malaspina College Nanaimo British Columbia  
(604) 753-3245, Local 2226 Fax (604) 755-8742 Callsign VE7GDA

I do not recycle..... I keep everything! (All standard disclaimers apply)

-----  
Date: Fri, 5 Feb 1993 17:04:06 GMT  
From: agate!linus!progress!glenn@ames.arpa  
Subject: Computer Control of Icom IC-R7100  
To: info-hams@ucsd.edu

I am trying to control my R7100 by computer.  
The manuals are incomplete and hard to read. I  
have gotten a few functions to work - like reading  
and setting the frequency and mode. Commercial  
scanning software seems to be able to do a lot more  
like set squelch, read memories, read signal strength -  
functions not documented in the computer interface  
manual (in fact the R7100 is not even mentioned).  
Does anyone have more info or documentation?  
Or better yet, any software (source code???) to  
control this rig?

-----  
Date: Fri, 5 Feb 93 18:08:20 GMT  
From: pacbell.com!att-out!walter!porthos!canis!rcmcc@network.UCSD.EDU  
Subject: Great Circle Map Program by VK5BUB  
To: info-hams@ucsd.edu

This was meant to be a direct email note to  
Garry Barker, VK5BUB, on his GCP program  
that he submitted in December, but I erased  
the original posting with his email address  
during my New Year's cleanup.

I hope that either Garry is reading this  
or someone will forward it to him or  
that someone will forward me his email address.

If you haven't tried his great circle map program,  
you should. It's available by anonymous ftp  
from the simtel mirror sites under msdos graphics  
as gcp915.zip.

Thanks.

Ron McConnell, w2iol

++++ ENCLOSED NOTE ++++++

Garry,

GCP is a nice program! I've toyed with  
the idea of writing such a program for  
years but never got around to it.

In the notes, you describe how you read

latitude and longitude coordinates for coastlines from an atlas by hand and eye and then interpolate in GCP. Are you familiar with Micro World Data Bank II? It has the world boundaries in 3 (or 4?) levels of detail with rivers and other data as options. It is available from the shareware mail order outfits on disks. There may be an ftp source. I believe the data itself is public domain from the US gov't.

Ron McConnell, w2iol

-----  
Date: 6 Feb 93 18:59:22 GMT  
From: ogicse!uwm.edu!spool.mu.edu!darwin.sura.net!rouge!jpd@network.UCSD.EDU  
Subject: MFJ 1278 Rom upgrade time??  
To: info-hams@ucsd.edu

New software is (as far as I know) Version 3.6 dated 09/30/92. I observe that the KISS mode is still broken (like in the 1270B) as it spontaneously reboots after it is idle for a time. This loses the KISS parameters programmed by NOS, for example. TAPR re-released their 1.1.8 which acquired this bug, as 1.1.8A. Why can't MFJ do likewise?

I had problems with AMTOR display using 3 characters per line, in previous versions. I have not seen it in v3.6, but I haven't used it much so far.

They added 16-level grey scan to fax/sstv mode, and color mode also. You'll probably need a software update to use it. Their software WAS copy protected and I refuse to buy it. If the new version is NOT PROTECTED perhaps I'll give it a try.

Looks like they reworked the packet mailbox to do forwarding, allow a remote sysop, allow a different ssid for the mbox, etc.

There's a MARS mode and a HOST mode and a new calibration procedure. Speaking of calibration, I use a TS440S with a 500 kHz filter. I redid the calibration to suit the audio characteristics of the ts440; no longer do I have to also fiddle with the IF shift control. I also reset the VB filter for 425 Hz shift commercial RTTY monitoring (thanks, N5OFF, for the idea).

Now, if they can add PACTOR in the next version.....

--  
-- James Dugal, N5KNX Internet: jpd@usl.edu

Associate Director      Ham packet: n5knx @k5arh (land), U0-22 (sat.)  
Computing Center      US Mail: PO Box 42770 Lafayette, LA 70504  
University of Southwestern LA.    Tel. 318-231-6417 U.S.A.

Date: Fri, 5 Feb 1993 20:31:51 GMT  
From: munnari.oz.au!spool.mu.edu!sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!  
hpnmdla!alanb@network.UCSD.EDU  
Subject: Need help on impedance of 1/2 wave loop  
To: info-hams@ucsd.edu

In `rec.radio.amateur.misc`, `brad@microm.tnet.com` (Brad Fisher) writes:

```
>Hi there fellow ham's! I've been playing around with building
>a portable loop antenna for 10 meters (skiing trip next month!),
>and could use some help and/or advice on how to figure out the
>theoretical feed point impedance. I'd rather not have to go out
>right now and invest in a noise bridge, or some other 100 buck
>device to figure out approximately what I need to do to feed this
>thing properly.
```

```

...
>                                     |-----2.4 ft.
>                                     |
>                                     |
>                                coil
>          /-----UUUUU-----\
>          |                     |
>          |                     |
>          |                     |
>          |                     |
>feed  ---|                     |
>point  <----- max power      |
>          |                     |
>          |                     |
>          |                     |
>          |                     |
>          \-----UUUUU-----/

```

With a total circumference of 9.6 feet, you have about a .3-wavelength loop. Without the loading coils, the radiation resistance would be on the order of half an ohm. (I don't have a written reference in front of me, but I think that's about right.) It would also be non-resonant. With the loading coils, the resistance would increase due to the loss resistance of the coils.

Assuming you have adjusted the coils for resonance, you can measure the impedance (resistance) with an SWR meter:

Impedance at resonance =  $50 / \text{SWR}$  ohms

(Assuming the resistance is less than 50 ohms.)

AL N1AL

-----  
Date: 5 Feb 1993 16:31:29 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!  
spool.mu.edu!studsys.msccs.mu.edu!jason@network.UCSD.EDU  
Subject: Problems with RF and '93 Sentra?  
To: info-hams@ucsd.edu

I am thinking of buying a '93 Sentra and am wondering if there are any known problems with this car and ham radios in it?

--  
Jason Hanson | 915 W. Wisconsin Ave #1010 | (414) 288-2179  
Marquette University | Milwaukee, WI 53233-2373 | Ham Radio: N9LEA/AA  
-- jason@studsys.msccs.mu.edu ==+== n9lea@n0ary.#nocal.ca.usa.na --

-----  
Date: 6 Feb 93 15:40:00 GMT  
From: sdd.hp.com!elroy.jpl.nasa.gov!usc!hela.iti.org!cs.widener.edu!dsinc!ub!  
acsu.buffalo.edu!ubvmsb.cc.buffalo.edu!v111qheg@network.UCSD.EDU  
Subject: Proposition  
To: info-hams@ucsd.edu

In article <1993Feb6.120707.16438@nnntp2.cxo.dec.com>, little@nuts2u.enet.dec.com  
(nuts2u::little) writes...

>v111qheg@ubvmsd.cc.buffalo.edu (P.VASILION) writes:  
>>Summary: General, Advanced and Extra Licensees are not affected. The Tech.  
>>license becomes the initial class of license. The Novice becomes the  
>>second step in the license ladder. Current question pools are revamped to  
>>reflect the change of licensing. A new exam element, 2b, is created and thus  
>>a new question pool for this license. Element 2 and 3a are needed to pass  
>>the Technician. These elements have had HF-related questions removed. The  
>>VEC's would be given the authority to issue STA's for current Techs with code  
>>to continue to operate on HF while they pass the new Novice exam and while  
>

>Again, the real issue is making the privileges granted by the Morse code  
>exams related to the Morse code exams to the extent allowed by  
>international treaty. Currently to use phone on any band below 10 meters  
>one needs to pass a 13 WPM Morse code test. How does that test relate to  
>those privileges???? If the 13 WPM test simply granted additional CW  
>spectrum, that would be cool. But why is it a gating factor for phone,  
>digital, or other modes?

>

While I agree on the point that the examinations should be modified somewhat to reflect the operating skills and so forth needed by the new licensee, I honestly do not know what is so grievously wrong with the code exams! More hams out there have passed a code exam than have not. HOWEVER, to get back to the point, the exams are written as they are to make the examinee \*demonstrate competence in ham radio over all\*, rather than being a test of their knowledge of what their privileges are. Furthermore, to operate on the HF bands below 10 meters, one STILL has to take an additional 25 question written exam. The code test does not directly relate to the phone and digital allocations as you correctly mentioned but the code exam DOES force an examinee to be committed to ham radio. Anyone can pass the theory exams (notice the # of extras who are below the age of 12). The code requires more effort to learn and master for the test than do the answers to the exams. While I agree that this filter does discriminate, I think it is beneficial in that it makes the exams a serious test of commitment to MOST people. Don't forget some countries require 15WPM for operating below 10 meters and some even require 28WPM for the same privileges (Nepal -but don't know that 9N1MM ever knew a stitch of code!).

One last point: We STILL need the incentive licensing program. If you remove code or make the exams reflect privileges granted, we would lose the incentive program and the bands would be flooded by LIDS who really don't know square one about Ham Radio.

If I sound like an OF, forgive me. I'm 18 and was licensed two years ago. I hope to have 50 more years of enjoyable ham radio in my life and I am trying to preserve the quality of the hobby. A license is something that you should have the UTMOST respect for. It is not YOUR RIGHT to transmit where ever you want to. You must demonstrate your respect for other people's rights on the bands as well.

73, es gud DX,

Peter Vasilion, KB2NMV  
WNYDXA --> see you at Dayton!  
v111qheg@ubvms.cc.buffalo.edu

-----  
Date: 5 Feb 1993 14:02:51 GMT  
From: sun-barr!cs.utexas.edu!bcm!lib!oac.hsc.uth.tmc.edu!jmaynard@ames.arpa  
Subject: QRP amplifier ?  
To: info-hams@ucsd.edu

In article <1993Feb5.000053.25564@ke4zv.uucp> gary@ke4zv.UUCP (Gary Coffman)



writes:

>You bet! I've been bitten a few times by filters. Real Radios(tm)  
>have interlocks and shorting bars. With our toys we have to learn  
>to be careful and \*always\* hang the Jesus stick on the circuit before  
>touching it. I follow a set procedure of pulling the plug then hanging  
>the safety stick in place before touching the innards of a radio.  
>\*Any radio\*. (Well not HTs)

This is an important point, and bears repeating.

The best safety tool you can have is an entrenched habit. Just as my habitual way of starting a car is to get in, put on the seat belt, then put the key in the ignition - done, every time, in that order, without fail - so the habit of pulling the plug, hanging the shorting bar on the circuit, and only then going in is the best way to make sure that your shiny transmitter isn't the instrument of your death.

(This post came at a highly appropriate moment - I just put down February QST after reading about the guy with the Collins 300G-1 AM transmitter...)

--

Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can  
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.

"begin 666 foo B22!C86XG="!B96QI979E('E0=2!D96-09&5D('1H:7,A"@ ` end"

-- David Charlap

-----  
Date: 6 Feb 93 14:34:20 GMT

From: ogicse!emory!gatech!wa4mei!ke4zv!gary@network.UCSD.EDU

Subject: RF exposure

To: info-hams@ucsd.edu

In article <C20z71.9rM@acsu.buffalo.edu> oopdavid@ubvmsd.cc.buffalo.edu (D.RODMAN) writes:

>In article <1krjav\$pd1@hamblin.math.byu.edu>, tatsuya@sofya.math.byu.edu writes...

>>Recently, once again, I am starting to worry about RF exposure.

>>Does anyone tell me how many times more RF expousre I am getting if I use

>>rubber duck next to my head compare w/ say, 50W on the top of my roof.

>>

>You should expect a 5 watt XCVR has about 100 V/M around your head and

>arm. Readings will vary, depending on how close you are to the antenna

>and how much power you have. Your mobile installation has the potential

>to have more or less, depending on how your antenna is mounted. I suggest

>keeping mobile antennas away from the passenger compartment as possible.

>This recommendation is based in the image of your signal, which appears

>in the passenger compartment, when you transmit. Mounting the antenna

>on the trunk and using the low power position of your rig is

>ALWAYS best.  
>73, Dave (KN2M)

Bad advice Dave. Putting an antenna on the trunk puts the main lobe of the antenna firing through the rear window right at the back of your head. Also, the likely poor RF ground will cause RF on the feedline back into the interior of the passenger compartment. Putting the antenna in the center of the roof will result in the smallest amount of RF in the passenger compartment. The good RF groundplane will decouple RF off the feedline, the main lobe will be above the car, and the image currents will, as always, flow on the \*outside\* of the metal top due to skin effect.

Trunk mounts, fender mounts, and worst of all, glass mounts are guaranteed to put more RF in the cabin than a good center of the roof mount through a drilled or punched hole.

Gary

```
--
Gary Coffman KE4ZV          | You make it,      | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it.     | uunet!rsiatl!ke4zv!gary
534 Shannon Way           | Guaranteed!      | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244   |                   |
```

-----  
Date: 6 Feb 93 14:16:38 GMT  
From: ogicse!uwm.edu!cs.utexas.edu!asuvax!ennews!stat!david@network.UCSD.EDU  
Subject: What is the best way to access packet radio via the INTERNET  
To: info-hams@ucsd.edu

news\_feed@ica.UUCP writes:

>  
> I am studying for my HAM license and I hope to join my friend  
> in the HAM community soon. In the mean time,I was wondering  
> if it was possible from my HAM friends to communicate with me  
> from their pbbs systems and have the traffic forwarded to the  
> Internet & vice versa. Is this legal to do for personal use?

#### How to Use the WB7TPY Packet <-> Internet Gateway

First, some brief operational notes:

- (1) Messages must not contain any foul language, or commercial purpose.
- (2) Messages can only be sent to countries that the United States has

a third-party agreement. All others will be destroyed.

(3) Messages from the internet should be less than 5K in length.

No files should be sent.

(4) If you have questions, please do not hesitate to contact me either on  
packet radio: WB7TPY@WB7TPY.AZ.USA.NA                    -or-

Internet        : david@stat.com                            -or-

Fidonet        : David Dodel   @ 1:114/15

(5) Have fun. Use the gateway as much as you like. That is what it is  
there for.

-----  
From Internet to Packet  
-----

Send mail to the internet address of:

gate@wb7tpy.ampr.org

The first line of text must contain a full packet address, preceded with the  
word "Packet:"

For example, mail to my packet address, would have the first line of text;

Packet: wb7tpy@wb7tpy.az.usa.na

-----  
From Packet to Internet  
-----

Send as private mail (never a bulletin) to the packet address of:

gate@wb7tpy.az.usa.na

The first line of text must contain a full domain internet address,  
preceded with the word "Internet:"

For example, mail to my internet address, would have the first line of text;

Internet: david@stat.com

---

Internet: david@stat.com  
Bitnet: ATW1H@ASUACAD

FAX: +1 (602) 451-1165  
FidoNet=> 1:114/15

Amateur Packet ax25: wb7tpy@wb7tpy.az.usa.na

-----  
Date: 5 Feb 93 19:32:40 GMT  
From: usc!zaphod.mps.ohio-state.edu!darwin.sura.net!gatech!pitt.edu!gvls1!gvlf9-q!  
rossi@network.UCSD.EDU  
Subject: What prevents someone from having 2 amateur licenses?  
To: info-hams@ucsd.edu

What mechanism does the FCC and VECs have to prevent someone from obtaining more than one amateur license?

I was talking with a friend the other day and we came up with the following:

WHAT IF... A licensed amateur (let's say he has an extra) were to go down to his local VE testing center where his is unknown, and takes (for example) a no-code Tech test. Fills in the application with either the same name and address on his current license, uses a different address, or maybe uses a variation of his name (missing middle name, etc). Do VEs really check that closely?

What would happen? Is there anything that would prevent it from slipping through the cracks and a second license showing up in his mailbox?

It becomes more interesting if the person has two residences and could come up with legal forms of ID that had a different address.

ORIGINAL -> W3XYZ John M. Smith EXTRA 123 Main Street Anytown, USA.

COPY -> N3XAA J. Michael Smith TECHNICIAN 123 Main Street Anytown USA

COPY -> N3XBB John M. Smith TECHNICIAN 456 Other Street Somewhere USA

Except for having the same birthday, how would anyone know or even suspect that they were all actually the same person? I wonder if it has ever been done?

=====  
Pete Rossi - WA3NNA ross@VFL.Paramax.COM

Paramax Systems Corporation - a Unisys Company  
Electronic Systems - Valley Forge Engineering Center - Paoli, Pennsylvania  
=====

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Date: Fri, 05 Feb 93 20:35:06 GMT

From: usc!elroy.jpl.nasa.gov!orchard.la.locus.com!prodnet.la.locus.com!

lando.la.locus.com!dana@network.UCSD.EDU

To: info-hams@ucsd.edu

References <1993Feb4.010546.12345@samba.oit.unc.edu>,

<1993Feb4.023437.29919@en.ecn.purdue.edu>, <1993Feb4.171253.1465@netcom.com>

Subject : Re: Proposition

In article <1993Feb4.171253.1465@netcom.com> mont@netcom.com (Mont Pierce) writes:

>In article <1993Feb4.023437.29919@en.ecn.purdue.edu> n9ljx@en.ecn.purdue.edu

(Scott A Stambaugh) writes:

>>In article <1993Feb4.010546.12345@samba.oit.unc.edu>

Kirk.Smith@launchpad.unc.edu (Kirk Smith) writes:

>>>

>>>No code Tech's should be given access to some Novice CW only bands.

>>>

>>

>>Uh Gee....How about they practice where the novice do. At home with a key and

>>tone ocsialtor!! UNfortunately you cannot have HF privledges without showing

>>CW proficiency.

>>

Or, the Technicians could practice CW on 6m or 2m, both of which have

CW only segments. Nahhh... that would be too easy.

>I agree with both of you... But what I don't understand why the public

>has access to 11 meters? Doesn't it have as much propagation as 10 meters?

>I guess there is something different about the band or the international

>agreements about it that I don't understand.

The international agreement applies to people licensed for international

communications. The CB service is not authorized for international

communications, though such communications frequently take place.

>If no-code techs had cw privledges on 10m, it would give them a place to

>practice cw with currently existing easily obtainable gear. It might also

>give them just a taste of what HF is like. Even when propagation is poor,

>they could make scheds with others on the local repeaters and practice

>together.

The same argument can be made for 6m gear. It is as easy to buy a 6m

rig as a 10m rig. The propagation is similar, etc., etc.

--

\* Dana H. Myers KK6JQ | Views expressed here are \*

\* (310) 337-5136 | mine and do not necessarily \*

\* dana@locus.com DoD #466 | reflect those of my employer

\*

\* This Extra supports the abolition of the 13 and 20 WPM tests \*

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End of Info-Hams Digest V93 #178

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